

AMENDMENTS TO THE CLAIMS:

This listing of the claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

1-34 (canceled)

35. (presently amended) A method of detecting a target polynucleotide which comprises the steps of:

a) contacting a target polynucleotide having a first portion and a second portion immediately contiguous to one another with:

i) an invader oligonucleotide, at least a part of which is capable of specifically hybridizing to the first portion of the target polynucleotide;

ii) a probe oligonucleotide comprising a first region that is capable of specifically hybridizing to the second portion of the target polynucleotide and an ~~flap unpaired~~ region located adjacent to the first region; and

iii) a reagent that is capable of cleaving ~~to release the flap unpaired region~~ of the probe oligonucleotide ~~to produce a cleaved unpaired region~~ when the probe oligonucleotide is hybridized to the second portion of the target polynucleotide and the invader oligonucleotide is hybridized to the first portion of the polynucleotide;

under conditions such that the cleaved ~~flap unpaired~~ region of the probe oligonucleotide and the reagent can come into contact with ~~a reporter precursor~~ ~~an incomplete cleavage structure,~~ to which the ~~flap unpaired~~ region of the probe oligonucleotide is capable of hybridizing, to form a complex that can be[[,]] cleaved by the reagent to provide a ~~reporter product~~ capable of being detected;

b) detecting the ~~reporter product~~ to provide a signal; and

c) determining whether the signal exhibits a specific behavior as a function of time[[.]] , ~~wherein said specific behavior as a function of time is non-linear, and wherein said signal that exhibits said specific behavior as a function of time is indicative of the presence of said target nucleic acid.~~

36-46 (canceled)

47. (previously presented) The method of Claim 35 wherein the signal is fluorescence or phosphorescence.

48-61 (canceled)